

A P P E N D I X II:

THE AMENDED CLAIMS (clean version):

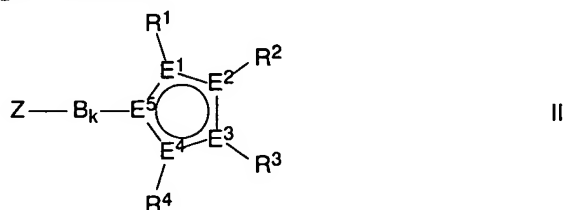
1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (currently amended) A process for polymerization or copolymerization of olefins, in which olefins are polymerized in the presence of the following components:
 - (A) a substituted monocyclopentadienyl, monoindenyl, monofluorenyl or heterocyclopentadienyl complex of formula (I)



in which the variables have the following meaning:

M is chromium, molybdenum or tungsten,

Y is described by formula II

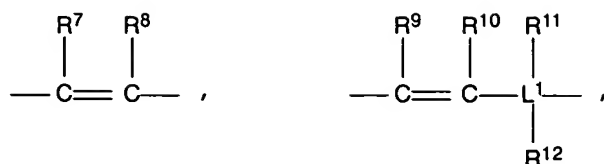


in which the variables have the following meaning:

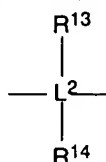
E¹-E⁵ are carbon or at maximum one of E¹ to E⁵ is phosphorus or nitrogen,

Z is NR⁵R⁶, PR⁵R⁶, OR⁵, SR⁵, or an unsubstituted, substituted or condensed, partially unsaturated heterocyclic or heteroaromatic ring system,

B is one of the following groups:



and additionally, if Z is an unsubstituted, substituted or condensed, partially unsaturated heterocyclic or heteroaromatic ring system, B can also be



in which

- L^1 , L^2 denotes silicon or carbon,
- k denotes 1, or if Z is an unsubstituted, substituted or condensed, partially unsaturated heterocyclic or heteroaromatic ring system, is also 0,
- X independently of one another fluorine, chlorine, bromine, iodine, hydrogen, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{20} aryl, alkylaryl with from 1 to 10 C atoms in the alkyl radical and from 6 to 20 C atoms in the aryl radical, $\text{NR}^{15}\text{R}^{16}$, OR^{15} , SR^{15} , SO_3R^{15} , $\text{OC(O)}\text{R}^{15}$, CN, SCN, β -diketone, CO, BF_4^- , PF_6^- , or bulky non-coordinating anions,
- R^1 - R^{16} independently of one another hydrogen, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_6 - C_{20} aryl, alkylaryl with from 1 to 10 C atoms in the alkyl radical and from 6 to 20 C atoms in the aryl radical, SiR^{17}_3 , in which the organic radicals R^1 - R^{16} can also be substituted by halogens, and two geminal or vicinal radicals R^1 - R^{16} can also be joined to a 5- or 6-membered ring,
- R^{17} independently of one another hydrogen, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_6 - C_{20} aryl, alkylaryl with from 1 to 10 C atoms in the alkyl radical and from 6 to 20 C atoms in the aryl radical, and two geminal radicals R^{17} can also be joined to a 5- or 6-membered ring,
- n is 1, 2 or 3,
- m is 1, 2 or 3,
- (B) optionally, one or more activator compounds, and
- (C) one or more additional catalysts conventionally used for the polymerization of olefins.

9. (*original*) The process of claim 8, in which the activator compound (B) is a compound selected from the group of aluminum oxane, dimethylanilinium tetrakis(pentafluorophenyl) borate, trityltetrakis(pentafluorophenyl) borate, or trispentafluorophenylborane.
10. (*currently amended*) The process of claim 8, in which at least one olefin selected from the group of ethene, propene, 1-butene, 1-pentene, 1-hexene, 1-heptene, 1-octene and 1-decene is polymerized.
11. (*currently amended*) The process of claim 8, in which an olefin selected from the group of propene, 1-butene, 1-pentene, 1-hexene, 1-heptene and 1-octene is polymerized.
12. (*original*) The process of claim 8, in which the polymerization is conducted in suspension, in solution, or in the gas phase.
13. (*original*) Polymers of olefins, obtainable by the method of claim 8.
14. (*original*) Fibers, films and moldings, containing polymers of olefins of claim 13 as essential components.
15. (*new*) The process of claim 8, in which M is chromium.
16. (*new*) The process of claim 8, in which Z is an unsubstituted, substituted or condensed heteroaromatic ring system.
17. (*new*) The process of claim 8, in which $E^1E^2E^3E^4E^5$ together with $R^1R^2R^3R^4$ is unsubstituted or substituted indenyl.
18. (*new*) The process of claim 8, in which component (C) comprises at least one conventional olefin polymerisation catalyst selected from the group consisting of Ziegler-Natta catalysts, Phillips catalysts, metallocenes, constrained geometry complexes, nickel and palladium bisimine catalyst systems, iron and cobalt pyridine bisimine compounds and chromium amides.
19. (*new*) The process of claim 8, in which component (A) and/or component (C) is immobilized on an organic or inorganic support.
20. (*new*) The process of Claim 8, in which component (C) is used for the in situ preparation of comonomers.